

Advanced Algebra - Compound Inequalities
Assignment # _____

Name _____

Graph each inequality.

1. $x > -2$

2. $-4 < x < 7$

3. $3 \leq x < 5$

Solve.

4. $4(1 - a) + 6(1 + a) < 0$

5. $\frac{1}{4}(3x - 1) > \frac{1}{2}(5x + 3)$

6. $d > 0$ and $d < 4$

7. $t < 3$ and $t < 5$

8. $y > -2$ or $y < 3$

8. $k < 4$ or $k \geq 4$

9. $-3t < 9$ or $-3t > 9$

10. $-5g < -10$ or $10 < -5t$

$$11. \quad 6 - x \leq 2 \text{ or } t - 6 < 2$$

$$12. \quad 1 - 2y > 7 \text{ or } 1 - 2y < -1$$

$$13. \quad k + 2 \leq -4 \text{ and } k + 2 > 4$$

$$14. \quad 3a - 5 > 2a \text{ and } 3a - 5 < -2a$$

$$15. \quad 2x - 6 < x \text{ or } 6 - 2x < -2$$

$$16. \quad 3y < 4y + 1 \text{ and } 3 - y < 1$$

$$17. \quad 3 - \frac{1}{2}x \geq -2 \text{ and } 2(1 - 2x) \leq 4$$

$$18. \quad 2(1 - s) > 1 - 2s \text{ or } 2(2s - 3) \leq 2$$